

*REMARKS/ARGUMENTS*

Claims 1, 3-13, and 15-25 are presently pending. Of these, claims 1, 6-13, and 15-25 stand rejected under 35 U.S.C. §103 as obvious over Pecore (U.S. 6,014,325) (hereinafter "Pecore") in view of Limpaecher (U.S. 5,270,913) (hereinafter "Limpaecher"). The action indicates that claims 3-5 are allowable. Of the previously pending claims, claims 1, 13, 15, 22 and 23 are independent.

ALLOWABLE SUBJECT MATTER

As noted above, the action indicates that claims 3-5 would be allowable if rewritten without dependence upon any rejected base claim. Applicant appreciates the indication of allowable subject matter, and the claims have been amended accordingly herein to remove any dependency upon rejected base claim 1. Thus, it is submitted that claims 3-5 are now in condition for allowance.

REJECTIONS: LACK OF ALL ELEMENTS

As noted above, claims 1, 6-13, and 15-25 stand rejected as obvious over Pecore in view of Limpaecher. A prima facie case of obviousness under §103 has not been made if the cited combination of references fails to teach the claimed combination of elements. It is respectfully submitted that such is the case here.

Referring to claim 1, the action cites Pecore for a number of the claim elements, but correctly notes that Pecore fails to teach a second output stage that includes an inverter connected to the second wave rectifier and at least one zener diode. The action then generally refers to Limpaecher as teaching these elements. In particular, the action asserts that claim 1 of Limpaecher teaches an inverter. However, Limpaecher's claim 1 does not describe an inverter at all, it simply recites means to electrically invert a capacitor bank, and so Applicant has reviewed the references actual teachings to determine what Limpaecher teaches for this inversion means.

As an initial matter, it is interesting to note that the term "inverter" is never used in conjunction with the inversion means of Limpaecher. In fact, every time that term is used, it refers to the entire device of Limpaecher in a colloquial sense, not any particular device

therein. *See for example*, Limpaecher Abstract (“A number of integrated TPCS modules can be configured to perform in a single system as a voltage transformation stage, a power converter or inverter...”). Thus, although Limpaecher teaches an inversion scheme for capacitors, it does not teach an inverter in the sense claimed in the present application.

In the present case, the specification employs the term “inverter” in accordance with its common usage in the art to identify a class of circuit elements that invert the polarity of a signal from its input to its output. For example, as described in paragraph [0010], this class of circuit elements may include a transistor in either the common emitter configuration or the common source configuration. Such a configured transistor is commonly known in the art as an inverter because it inverts the polarity of an applied signal. To the extent that Limpaecher refers to his overall device as an inverter, he is using the term in another sense -- the term “inverter” as used in the electric power context can refer to a machine, device, or system that changes direct current power to alternating current power, however, this alternative definition is clearly not applicable in the context of the present claims.

Referring now to the polarity reversal of selected capacitors in Limpaecher, this reversal does not use an inverter that could be simply taken from Limpaecher’s device and soldered into the device of Pecore. In particular, the capacitor reversal in Limpaecher is not accomplished via an inverter, i.e., a circuit element that accepts an input signal and provides at its output a signal of opposite polarity. Rather, Limpaecher uses switches to actually reconfigure the selected capacitors – the positive side is actually isolated and reconnected where the negative side used to be, and vice versa. *See* Limpaecher at 6:46-64 (“The purpose of the step-up inversion cycle is to change the polarity of half of the capacitor strings such that all of the capacitors have the same polarity. ...Such switches or switching configuration prevents the current from ring back through the inductor and allows the extraction of the inverted energy in an efficiently and controlled fashion.”). So while this is generally an inversion process, there is clearly no signal “inverter” involved as that term is used in the present claims.

Put another way, the capacitor inversion process of Limpaecher is akin to taking a battery out of a device and reinstalling it in the wrong direction. In contrast, an inverter would simply take the existing battery voltage and provide instead an inverted signal.

Thus, it is respectfully submitted that Limpaecher fails to teach the recited inverter of claim 1. Although claim terms under examination should be given their broadest reasonable interpretation during prosecution, this is of course not a license to interpret any term in a manner that is inconsistent with the specification. With respect to the remaining independent claims 13, 15, 22 and 23, these claims stand rejected on the same grounds as claim 1. Thus, for the reasons set forth above, favorable reconsideration of the independent claims and their dependent claims is respectfully requested.

#### REJECTIONS; IMPROPER COMBINATION

As noted above, claims 1, 6-13, and 15-25 stand rejected as obvious over Pecore in view of Limpaecher. Not only does this combination fail to teach each claim limitation, but the combination itself is improperly made. While the Office surely appreciates that every obviousness analysis in a sense relies on hindsight, the Office is also no doubt aware that this is not a license to ignore the law and dispense with the requirement to show some motivation in the art (the cited art, other art, the knowledge in the art – but it has to be in the art, not in Applicant's disclosure) to make the asserted combination. MPEP §2145(x)(A) (Although "any judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning," it could be proper if it "takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure.") (emphasis added, citations omitted).

In the present case, the cited motivation for attempting to modify Pecore in view of Limpaecher was to "provide a dual output transformer less power supply with the means to invert the first DC output with respect to the second DC output." See action at page 4. While this verbiage certainly contains terms taken from each reference, it still fails to state any sort of motivation.

For example, consider the combination of a dirty diaper with a ham sandwich. Would this combination be obvious? Well, I could assert that one of skill in the art would be motivated to make the combination in order "to provide a dirty diaper with means for having a ham sandwich." Right? Of course not. As a matter of simple logic, a combination of selected words from each reference without some teaching or suggestion of the desirability

of the stated end result is simply not a motivation to get to the end result. Otherwise, anything is combinable with anything else, and everything is obvious, and the Examiner has effectively overruled the U.S. Congress that enacted §103 – a legally impermissible result.

Stating the desired end result is not equivalent to stating the legally required motivation.

Moreover, the action cites Limpaecher as teaching a motivation at col. 7, line 64- col. 8, line 3. However, the cited section, reproduced below, does not appear to have any relation to the asserted combination:

The TPCS has the capability of step-up as well as voltage step-down. FIG. 3 shows the electrical schematics and some selected voltage and current waveform for a three stage DC to DC transformation. In addition I have selected a negative to negative polarity transformation. Reversing all of the shown solid state devices would simply change the device to a positive to positive step-down voltage inverter.

If the Office's intent was that this section would motivate one to use an inverter, it should be noted that this section itself fails to use an inverter! In particular, instead of inverting signals, this section specifically suggests actually taking out solid state devices and **putting them back in backwards**. If anything, this is a strong teaching to **not** use an inverter.

#### REQUESTS FOR CLARIFICATION

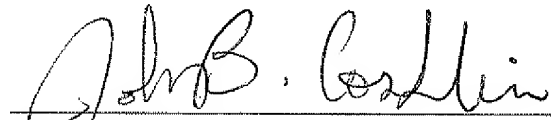
Given the already extended prosecution of this application to date, Applicant would like to expedite the remaining prosecution to the extent possible. Thus, in the event that the present rejections are maintained, clarification on the following elements of the alleged prima facie case is respectfully sought and would be greatly appreciated:

- (1) What device or element in Limpaecher is asserted to be an inverter?
- (2) On what basis is that device or element considered to be an inverter?
- (3) Please explain the hypothetical location and function of the alleged inverter of Limpaecher in the device of Pecore.
- (4) Even if it were true that Limpaecher taught the use of an inverter and that the combination of Pecore and Limpaecher would have thus provided "a dual output transformer less power supply with the means to invert the first DC output with respect to the second DC output," is there any indication anywhere in the art that this combination would be desirable, and if so where?
- (5) Has the Office considered that Limpaecher expressly teaches away from the combination as discussed above, and if so, under what logic or authority has this teaching away been disregarded?

CONCLUSION

Applicant respectfully submits that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "John B. Conklin", is written over a horizontal line.

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